Via Email: https://www.fs.usda.gov/project/?project=56912

September 22, 2020

Jamie Tripp and Molly Ryan, District Rangers
Beaverhead-Deerlodge National Forest
420 Barrett St.
Dillon, MT 59725

Dear Jamie and Molly:

On behalf of the American Forest Resource Council (AFRC) and its members, thank you for the opportunity to comment on the Selway Saginaw Project.

AFRC is a regional trade association whose purpose is to advocate for sustained yield timber harvests on public timberlands throughout the West to enhance forest health and resistance to fire, insects, and disease. We do this by promoting active management to attain productive public forests, protect adjoining private forests, and assure community stability. We work to improve federal and state laws, regulations, policies and decisions regarding access to and management of public forest lands and protection of all forest lands. Many of our members have their operations in communities within and adjacent to the Beaverhead-Deerlodge National Forest and management on these lands ultimately dictates not only the viability of their businesses, but also the economic health of the communities themselves.

The Selway Saginaw Vegetation Management project area includes 66,289-acres. The project area is administered by the Dillon and Wisdom Ranger Districts on the Beaverhead-Deerlodge National Forest (BDNF). It is located entirely within Beaverhead County, southwest of Wisdom and west of Dillon, Montana. The Three Management Areas in the Project are managed for timber production, livestock grazing, dispersed recreation, historic preservation, and other forest products.

Because conditions in the project area do not meet Forest Plan goals or objectives, the purpose of this project is to move towards the following Timber Management, Vegetation, and Fire Management Goals and Objectives described in the Forest Plan.

A complete Purpose and Need includes:

1. **Timber Management**
    a. **Lands Suitable for Timber Production:** Manage lands suitable for timber production for the growth and yield of sawtimber, crop trees, pulpwood, and other forest products, including salvage harvest.
    b. **Lands Not Suitable for Timber Production but Timber Harvest is permitted to Meet Other Resource Objectives**: Manage lands where timber harvest is allowed to protect other resource values. Resource objectives may include, but are not limited to, protection of wildland urban interface, protection of improvements aquatic system restoration, fuel reduction, wildlife habitat enhancement, fisheries habitat enhancement, range improvement and grass and shrub land maintenance. Product Utilization: Forest products would be used to provide economic benefits where project objectives, forest plan objectives, and forest plan standards can be met.
2. **Vegetation**
    a. **Resiliency:** Reduce forest density in the large size classes of dry forest communities and some lodgepole pine communities to maintain or improve resilient forest conditions.
    b. **Grassland/Shrubland/Riparian**: Reduce conifer encroachment on 74,000 acres of riparian areas, shrublands, and grasslands.
3. **Fire Management**
    a. **Fuels Management**: A full range of fuels management activities is available to achieve ecosystem sustainability, including, economic and social components.

While AFRC supports the Purpose and Need of this Project we offer the following comments that we believe will make the Project better.

1. AFRC strongly believes that an additional Purpose and Need should be added to emphasize the importance of the forest products industry and that the wood from the Project area will ensure its survivability. Our members depend on a predictable and economical supply of timber products off Forest Service land to run their businesses and to provide useful wood products to the American public. This supply is important for present day needs but also important for future needs. This future need for timber products hinges on the types of treatments implemented by the Forest Service today. Of particular importance is how those treatments effect the long-term sustainability of the timber resources on Forest Service managed land. AFRC has voiced our concerns many times regarding the long-term sustainability of the timber supply on Forest Service land and how the current management paradigm is affecting this supply. While the treatments on the Selway Saginaw Project are unlikely to directly address this long-term sustainability concern, they will likely provide short-term products for the local industry and we want to ensure that this provision is an important consideration for the decision maker as the Project progresses. As we will discuss later in this letter the importance of our members' ability to harvest and remove these timber products from the timber sales generated off this Project is paramount. We would like the Forest Service to recognize this importance by **adding economic viability & support to the local infrastructure to**

the purpose and need of the Selway Saginaw Project. Supporting local industry and providing useful raw materials to maintain a robust manufacturing sector should be a principal objective to any project proposed on Forest Service land. As the Forest Service surely knows, the "restoration" treatments that are desired on these public lands cannot be implemented without a heathy forest products industry in place, both to complete the necessary work and to provide payments for the wood products generated to permit the service work to be completed.

2. AFRC is disappointed that the Forest has only chosen to treat 7,255 acres commercially as listed in Table 1 below; especially when you point out on page 15 of the scoping document that **"*The biggest management concern is the current spate of Mountain Pine Beetle in the project area and landscape susceptibility to an outbreak in the future.*** This represents only about 11% of the Project Area. AFRC requests that the Forest substantially increase the acres being commercially treated in the Final EA. The reasons for doing this are many, including efficiencies in NEPA. The costs for preparing a NEPA document are high and the Forest should maximize acres treated under this document. Second, the Project area won't be revisited for 20 or 30 years following this entry and all stands needing treatment during this timeframe should be treated. Third, the entire area where lodgepole pine is growing is at risk of lodgepole pine beetle damage. While this particular landscape has not yet experienced the breadth of tree mortality found in other parts of the Forest, the risk is there for further devastation across a broad landscape. Total treatments for stand improvement, forest health, fuels reduction and insect and disease prevention (both commercial and non-commercial) only covers 13,120 acres or about 20% of the Project area. Further, the Project is only treating 1,600 acres on lands not suitable for timber production but where timber harvest is permitted to meet other resource objectives. In this case the objectives are to increase resiliency by reducing the percent of the landscape at high risk of insect and disease infestation. AFRC believes the Forest is missing a big opportunity for improving other resources by not treating more forest stands.

Table 1. Summary of treatments and other actions. All numbers rounded up to nearest whole number.

Vegetation Management Activity	Acres	Description
Commercial		
Timber Harvest	7, 255	69 units
Non-Commercial		
Pre-commercial Thinning	2,156	66 units
Conifer Reduction Treatment	3,709	3 areas

3. Montana's forest products industry is one of the largest components of manufacturing in the state and employs roughly 7,700 workers earning about $335 million annually. The majority of the industry is centered in western and central Montana where the project is located. Without the raw material sold by the Forest Service these mills would be unable to produce the amount of wood products that the citizens of this country demand. Without this material, our members would also be unable to run their mills at capacities

that keep their employees working, which is crucial to the health of the communities that they operate in. These benefits can only be realized if the Forest Service sells their timber products through sales that are economically viable. This viability is tied to both the volume and type of timber products sold and the manner in which these products are permitted to be delivered from the forest to the mills.

4. There are many ways to design a timber sale that allows a purchaser the ability to deliver logs to their mill in an efficient manner while also adhering to the necessary practices that are designed to protect the environmental resources present on Forest Service forestland. The primary issues affecting the ability of our members to feasibly deliver logs to their mills are firm operating restrictions. As stated above, we understand that the Forest Service must take necessary precautions to protect their resources; however, we believe that in many cases there are conditions that exist on the ground that are not in step with many of the restrictions described in Forest Service EA's and contracts (i.e. dry conditions during wet season, wet conditions during dry season).

   We would like the Forest Service to shift their methods for protecting resources from that of firm prescriptive restrictions to one that focuses on descriptive end-results; in other words, describe what you would like the end result to be rather than prescribing how to get there. There are a variety of operators that work in the B-D National Forest market area with a variety of skills and equipment. Developing an EA and contract that firmly describes how any given unit shall be logged may inherently limit the abilities of certain operators. For example, restricting certain types of ground-based equipment rather than describing what condition the soils should be at the end of the contract period unnecessarily limits the ability of certain operators to complete a sale in an appropriate manner with the proper and cautious use of their equipment. To address this issue, we would like to see flexibility in the EA and contract to allow a variety of equipment to the sale areas. We feel that there are several ways to properly harvest any piece of ground, and certain restrictive language can limit some potential operators. Though some of the proposal area is planned for cable harvest, there are opportunities to use certain ground equipment such as fellerbunchers and processors in the units to make cable yarding more efficient. While we appreciate the language mentioning ground skidding may take place on slopes over 35% if approved, we would like the Forest to allow ground based equipment to operate on slopes up to 45%. Allowing the use of processors and fellerbunchers throughout these units can greatly increase its economic viability, and in some cases decrease disturbance by decreasing the amount of cable corridors, reduce damage to the residual stand and provide a more even distribution of woody debris following harvest. Tethered-assist equipment is also becoming a more viable and available option for felling and yarding on steep slopes. This equipment has shown to contribute little additional ground disturbance when compared to traditional cable systems. Please prepare your NEPA analysis documents in a manner that will facilitate this type of equipment.

   Finally, AFRC would like the Forest to examine the days that operations and haul are shut down due to hunting seasons and other outdoor recreation. The logging community

has a limited operating time at best, and further reductions such as these only makes surviving in the logging business that much more difficult.

5. The Forest proposes to cut larger conifer trees that have expanded into riparian areas and scatter them outside the riparian zone. Fire will be allowed to back into riparian areas, creating low severity fire effects intended to consume young conifers on the riparian edge, reduce litter, and burn decadent willow in order to encourage new growth. AFRC strongly believes that management should occur in the riparian areas and that any merchantable trees should be utilized.

   It has been well documented that thinning in riparian areas accelerates the stand's trajectory to produce large conifer trees and has minimal effect on stream temperature with adequate buffers. Removal of suppressed trees has an insignificant short-term effect on down wood, and ultimately a positive effect on long-term creation of large down woody debris and large in stream wood, which is what provides the real benefit to wildlife and stream health. We encourage the Forest Service to focus their riparian reserve treatments on a variety of native habitats. We also encourage the two Districts to look for ways to incorporate treatments that meet those needs. Utilization of gap cuts to promote early seral habitat in the reserves, treatments to diversify all areas of the reserve, and prescriptions that account for the full range of objectives should be considered.

   The tradeoffs that the Forest Service will likely be considering through the ensuing environmental analysis will be between achieving these forest health benefits and potentially having adverse impacts to streams. These impacts to streams typically include stream temperature, wood recruitment, and sedimentation associated with active management. We would like the Forest Service to review the literature cited below and incorporate its findings into your environmental analysis that will shape the level of management permitted to occur in riparian reserves.

   Stream temperature

   Janisch, Jack E, Wondzell, Steven M., Ehinger, William J. 2012. Headwater stream temperature: Interpreting response after logging, with and without riparian buffers, Washington, USA. *Forest Ecology and Management*, 270, 302-313.

   Key points of the Janisch paper include:

   - The amount of canopy cover retained in the riparian buffer was not a strong explanatory variable to stream temperature.
   - Very small headwater streams may be fundamentally different than many larger streams because factors other than shade from the overstory tree canopy can have sufficient influence on stream temperature.

   Anderson P.D., Larson D.J., Chan, S.S. 2007 Riparian Buffer and Density Management Influences on Microclimate of Young Headwater Forests of Western Oregon. *Forest Science,* 53(2):254-269.

   Key points of the Anderson paper include:

   - With no-harvest buffers of 15 meters (49 feet), maximum air temperature above stream centers was less than one-degree Celsius greater than for unthinned stands.

Riparian reserve gaps

Warren, Dana R., Keeton, William S., Bechtold, Heather A., Rosi-Marshall, Emma J. 2013. Comparing streambed light availability and canopy cover in streams with old-growth versus early-mature riparian forests in western Oregon. *Aquatic Sciences* 75:547-558.

Key points of the Warren paper include:

- Canopy gaps were particularly important in creating variable light within and between reaches.
- Reaches with complex old growth riparian forests had frequent canopy gaps which led to greater stream light availability compared to adjacent reaches with simpler second growth riparian forests.

Wood Recruitment

Burton, Julia I., Olson, Deanna H., and Puettmann, Klaus J. 2016. Effects of riparian buffer width on wood loading in headwater streams after repeated forest thinning. *Forest Ecology and Management*. 372 (2016) 247-257.

Key points of the Burton paper include:

- Wood volume in early stages of decay was higher in stream reaches with a narrow 6meter buffer than in stream reaches with larger 15- and 70-meter buffers and in unthinned reference units.
- 82% of sourced wood in early stages of decay originated from within 15 meters of streams.

Sedimentation

Rashin, E., C. Clishe, A. Loch and J. Bell. 2006. Effectiveness of timber harvest practices for controlling sediment related water quality impacts. *Journal of the American Water Resources Association*. Paper No. 01162

Key points of the Rashin paper include:

- Vegetated buffers that are greater than 33 feet in width have been shown to be effective at trapping and storing sediment.

Collectively, we believe that this literature suggests that there exists a declining rate of returns for "protective" measures such as no-cut buffers beyond 30-40 feet. Resource values such as thermal regulation and coarse wood recruitment begin to diminish in scale as no-cut buffers become much larger. We believe that the benefits in forest health achieved through density management will greatly outweigh the potential minor tradeoffs in stream temperature and wood recruitment, based on this scientific literature. We urge the Forest Service to establish no-cut buffers along streams no larger than 40 feet and maximize forest health outcomes beyond this buffer.

The links to the studies mentioned above are listed below for reference.
Janisch paper on stream temps:
https://www.sciencedirect.com/science/article/abs/pii/S0378112711007821

Dana Warren paper on light into the stream beds:
https://www.researchgate.net/publication/311850456_Long-

term_effects_of_riparian_forest_harvest_on_light_in_Pacific_Northwest_USA_st reams

Julie Burton Paper on headwater widths and wood recruitment:
https://www.semanticscholar.org/paper/Effects-of-riparian-buffer-width-onwood-loading-in-Burton-Olson/13c41421e2b6bf5eca847c4fb557235f3411127f

Edward Rashin article on Effectiveness of timber harvest practices for controlling sediment related water quality impacts:
https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1752-1688.2006.tb05303.x

6. AFRC supports for the most part the road plan for this Project which is listed below:

Table 2 Road management actions for project implementation

Action	Miles affected
System Road Maintenance (includes reconstruction miles)	117 miles
System Road Reroutes and realignments	Appx 1.5 miles
Construction of Temp Roads *(Obliterate after project completion)*	Appx 14 miles
Road Decommission	1.3 miles
Remove mapped roads that don't exist on the ground	2.02 miles.
Administrative Road Closure (Converted to ML 1)	2.05 miles.

We do have concern about the 15.3 miles of permananent and temporary road decommissioning. We would like to remind the Forest that an intact road system is critical to the management of Forest Service land, particularly for the provision of timber products in the general timber designated lands. Without an adequate road system, the Forest Service will be unable to offer and sell timber products to the local industry in an economical manner. The land base covered in the Selway Saginaw Project area is to be managed for a variety of forest management objectives. Removal of adequate access to these lands compromises the agency's ability to achieve these objectives and is very concerning to us. Roads proposed for decommissioning should be assessed to determine if objectives could be met instead by road closure using barriers or blockage of the road entrances. AFRC does not support obliteration or recontouring roads that are to be decommissioned because of the high cost involved. The project is already very uneconomical.

Furthermore, there are alternative methods to mitigating potential resource damage caused by poorly designed or poorly maintain roads aside from full decommissioning. Removing or replacing ineffective culverts, installing waterbars, and blocking access are all activities that can mitigate resource damage while maintaining useful roads on the landscape for future use. Please consider these methods as an alternative to full decommissioning.

AFRC believes that a significant factor contributing to increased fire activity in the region is the decreasing road access to our federal lands. This factor is often overshadowed by both climate change and fuels accumulation when the topic of wildfire is discussed in public forums. However, we believe that a deteriorating road infrastructure has also significantly contributed to recent spikes in wildfires. This deterioration has been a result of both reduced funding for road maintenance and the federal agency's subsequent direction to reduce their overall road networks to align with this reduced funding. The outcome is a forested landscape that is increasingly inaccessible to fire suppression agencies due to road decommissioning and/or road abandonment. This inaccessibility complicates and delays the ability of firefighters to quickly and directly attack nascent fires. On the other hand, an intact and well maintained road system would facilitate a scenario where firefighters can rapidly access fires and initiate direct attack in a more safe and effective manner.

If the Forest Service proposes to decommission, abandon or obliterate road segments from the Selway Saginaw Project area we would like to see the analysis consider potential adverse impacts to fire suppression efforts due to the reduced access caused by the reduction in the road network. We believe that this road network reduction would decrease access to wildland areas and hamper opportunities for firefighters to quickly respond and suppress fires. On the other hand, additional and improved roads will enable fire fighters quicker and safer access to suppress any fires that are ignited.

We would like the Districts to carefully consider the following three factors when making a decision to decommission any road in the project area:

- Determination of any potential resource risk related to a road segment.
- Determination of the access value provided by a road segment.
- Determination of whether the resource risk outweighs the access value (for timber management and other resource needs).

We believe that only those road segments where resource risk outweighs access value should be considered for decommissioning.

7. AFRC supports the concept of shaded fuel breaks along strategic roads within the project area. These fuel breaks should be wide enough to stop or slow down an intensive and fast moving wildfire. At a minimum, these breaks should be 300 feet wide on either side of those roads. The stands within those fuel breaks should be thinned to a wide spacing and low basal area to reduce the threat of a crown fire going through the area. The purpose of the fuel breaks is to get the fire to lay down on the ground for suppression purposes. This treatment is extremely effective in dealing with dead and dying lodgepole when developing fire breaks.

8. AFRC supports the Forest's decision to harvest trees in old growth stands provided the stands will meet Vegetation Standards when operations are concluded in those units. These treatments are proposed in order to increase the stand level resistance to insect and disease by reducing overall stand densities. These treatments will also contribute to

reducing the mountain pine beetle hazard at the landscape level. Old growth stands do very little good if they have been destroyed by insects, disease or fire, hence treatment is necessary to prevent that.

9. AFRC believes the Forest has done a good job of analyzing any effects to Endangered or Threatened Species.

    - Canada lynx – Currently there is no designated critical habitat for Canada lynx on the BDNF. The Forest Plan Wildlife Habitat Standard 7 applies the Northern Rockies Lynx Management Decision (NRLMD) to this project. Proposed vegetation management activities are consistent with standards and guidelines in the NRLMD.
    - Grizzly bears – The Selway Saginaw Vegetation Management project area is not located in a grizzly bear recovery area, but the BDNF is expected to provide habitat for transient male grizzly bears. Although there will be some short-term secure habitat reduction during implementation (2%), there will be no measurable change to secure area after completion.
    - Wolverine – Wolverine are an ESA Proposed Species and are known to travel through and likely inhabit the project area. Wolverine habitat can be characterized by deep, persistent and reliable spring snow cover (April 15 to May 14) and is the best overall predictor of wolverine occurrence in the contiguous U.S. No units are proposed for high elevation persistent spring snow areas, thus the project will not jeopardize the continued existence of the distinct population segment of the North American wolverine.
    - Bull trout – The streams in the project area are outside the range of bull trout and bull trout designated critical habitat. Therefore, bull trout are not considered in the analysis.

10. We would like to encourage the B-D to consider several documents related to carbon sequestration related to forest management.

    McCauley, Lisa A., Robles, Marcos D., Wooley, Travis, Marshall, Robert M., Kretchun, Alec, Gori, David F. 2019. Large-scale forest restoration stabilizes carbon under climate change in Southwest United States. *Ecological Applications*, 0(0), 2019, e01979.

    Key points of the McCauley paper include:

    - Modeling scenarios showed early decreases in ecosystem carbon due to initial thinning/prescribed fire treatments, but total ecosystem carbon increased by 9– 18% when comparted to no harvest by the end of the simulation.
    - This modeled scenario of increased carbon storage equated to the removal of carbon emissions from 55,000 to 110,000 passenger vehicles per year until the end of the century.
    - Results demonstrated that large-scale forest restoration can increase the potential for carbon storage and stability and those benefits could increase as the pace of restoration accelerates.

We believe that this study supports the notion that timber harvest and fuels reduction practices collectively increase the overall carbon sequestration capability of any given acre of forest land and, in the long term, generate net benefits toward climate change mitigation.

Gray, A. N., T. R. Whittier, and M. E. Harmon. 2016. Carbon stocks and accumulation rates in Pacific Northwest forests: role of stand age, plant community, and productivity. Ecosphere 7(1):e01224.10.1002/ecs2.1224

Key points of the Gray paper include:

- Although large trees accumulated C at a faster rate than small trees on an individual basis, their contribution to C accumulation rates was smaller on an area basis, and their importance relative to small trees declined in older stands compared to younger stands.
- Old-growth and large trees are important C stocks, but they play a minor role in additional C accumulation.

We believe that this study supports the notion that, if the role of forests in the fight against climate change is to reduce global greenhouse gasses through maximizing the sequestration of carbon from atmospheric CO2, then increasing the acreage of young, fast growing small trees is the most prudent management approach.

Links to the above mentioned studies can be found at:
Lisa McCauley article on large scale forest restoration stabilizes carbon:
https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/eap.1979

Andrew Gray article on Carbon stocks and accumulation rates in Pacific Northwest forests: role of stand age, plant community, and productivity:
https://www.fs.usda.gov/treesearch/pubs/52237

Thank you for the opportunity to provide scoping comments on the Selway Saginaw Project. I appreciate that the scoping document was only 29 pages, and thought it was very thorough and covered the needed subjects. Please keep me informed when the final EA comes out and the objection period begins.

Sincerely,

Tom Partin
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